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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/553,679

10/17/2005

Peter Tass

23384

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09/03/2008

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EXAMINER

EVANISKO, GEORGE ROBERT

ART UNIT

PAPER NUMBER

3762

MAIL DATE

DELIVERY MODE

09/03/2008

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/553,679	<b>Applicant(s)</b> TASS, PETER	
	<b>Examiner</b> George R. Evanisko	<b>Art Unit</b> 3762	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 19 June 2008.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 53-77 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 53-77 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>1/22/08, 11/16/07</u> .                                       | 6) <input type="checkbox"/> Other: _____                          |

**DETAILED ACTION*****Information Disclosure Statement***

The information disclosure statement filed 1/22/08 fails to comply with the provisions of 37 CFR 1.97, 1.98 and MPEP § 609 because several dates do not include the month of publication, several references do not include the date of publication, and the author is missing on several documents. It has been placed in the application file, but the information referred to therein that has been lined through has not been considered as to the merits. Applicant is advised that the date of any re-submission of any item of information contained in this information disclosure statement or the submission of any missing element(s) will be the date of submission for purposes of determining compliance with the requirements based on the time of filing the statement, including all certification requirements for statements under 37 CFR 1.97(e). See MPEP § 609.05(a).

***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 55-57, 62-67, 71, 72, and 74-77 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claims 55, 62, 64, 65, 71, 74, and 75, "such that a phase offset...amounts to T/N" is vague since the unit of time per electrode(s) can not be determined, how this is applied to the electrode(s), and in what order to multiple electrodes (3 or more) the stimulation is applied to two neuron subpopulations. Is the offset time just seconds, microseconds, seconds/electrode?

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In claims 56, 63, 67, 72, and 77, “such that time intervals between successive stimulation signals are substantially whole number multiples of the mean period duration T” is vague since the unit of time can not be determined and has not been set forth. Is this time seconds, milliseconds, microseconds, etc?

In claim 57, the use of "stimulates the respective neuron subpopulation directly" and "stimulates a further neuron population", and "stimulates a nerve fiber bundle" are vague since it sounds like there is a connection to the body. Apparatus claims can not claim a connection to the body and it is suggested to use functional language such as “adapted to stimulate” or “for stimulating”.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 53-70 and 73 are rejected under 35 U.S.C. 102(b) as being anticipated by Fischell et al (6459936). Fischell applies offset stimulation signals to neuron populations and subpopulations to stop/prevent/reset/reverse/desynchronize the populations as an epilepsy treatment therapy (e.g. see col. 15, col. 22-24, etc) using stimulation that can be from 0.1 Hz to 1000 Hz for 1 millisecond to 30 minutes and therefore his system can apply stimulation in whole number multiples of the mean period duration and with an offset of T/N.

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Claims 53-70 and 73 are rejected under 35 U.S.C. 102(b) as being anticipated by Pless (7174213). Pless applies offset stimulation signals to neuron populations and subpopulations to stop/prevent/reset/reverse/desynchronize the populations as an epilepsy treatment therapy (e.g. see col. 18, using different electrodes to deliver different pulse to pulse timing, figures 3, 4, 21, 22, etc) using stimulation that can be from around 0.5 Hz to 500 Hz for 0.05 to 60 minutes and therefore his system can apply stimulation in whole number multiples of the mean period duration and with an offset of T/N.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 71, 72, and 74-77 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fischell or Pless.

Fischell or Pless discloses the claimed invention and setting different offset parameters for particular patient based on the patient's neural disease (e.g. epileptic focus) during testing of the patient (e.g. col. 24 in Fischell, col. 10, 11, in Pless) except for the exact offset of T/N and using whole number multiples of the mean period duration to apply stimulation. It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the stimulation systems and methods as taught by Fischell or Pless with the exact offset of T/N and using whole number multiples of the mean period duration to apply stimulation, since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering

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the optimum or workable ranges involves only routine skill in the art [*In re Aller*, 105 USPQ 233] and since it has been held that a prima facie case of obviousness exists where the claimed ranges and prior art ranges do not overlap but are close enough that one skilled in the art would have expected them to have the same properties. *Titanium Metals Corp. of America v. Banner*, 778 F.2d 775, 227 USPQ (Please see MPEP 2144.05). In addition, since Fischell or Pless both disclose trying different electrical stimulation parameters to determine the appropriate stimulation for a particular patient, it would have been obvious to one having ordinary skill in the art to try different stimulation parameters, such as exact offset of T/N and using whole number multiples of the mean period duration to apply stimulation, to provide the predictable results of an effective stimulation pattern and therapy to suit a particular patient's needs and disease.

### ***Response to Arguments***

Applicant's arguments with respect to the claims have been considered but are moot in view of the new ground(s) of rejection necessitated by amendment. The argument that the present system uses less energy than Pless is not persuasive since the energy level used has not been claimed. Pless meets the broad limitations as presented in the claims as set forth above.

### ***Conclusion***

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after

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the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to George R. Evanisko whose telephone number is 571 272 4945. The examiner can normally be reached on M-F 6:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Angela Sykes can be reached on 571 272 4955. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/George R Evanisko/  
Primary Examiner, Art Unit 3762

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9/2/08

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